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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/373,333	08/12/99	SUBRAMANIAN	V 0113.004

MAXYGEN INC  
INTELLECTUAL PROPERTY DEPARTMENT  
515 GALVESTON DRIVE  
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HM22/1013

EXAMINER	
KRUUSE, D	

ART UNIT	PAPER NUMBER
1638	15

**DATE MAILED:** 10/13/00

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/373,333	SUBRAMANIAN ET AL.
Examiner	Art Unit	
David H Kruse	1638	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

**Status**

1) Responsive to communication(s) filed on \_\_\_\_\_.

2a) This action is **FINAL**.                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 1-60 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) \_\_\_\_\_ is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claims 1-60 are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved.

12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. § 119**

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) All b) Some \* c) None of the CERTIFIED copies of the priority documents have been:

1. received.

2. received in Application No. (Series Code / Serial Number) \_\_\_\_\_.

3. received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

**Attachment(s)**

15) Notice of References Cited (PTO-892)                    18) Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.

16) Notice of Draftsperson's Patent Drawing Review (PTO-948)                    19) Notice of Informal Patent Application (PTO-152)

17) Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ .                    20) Other: \_\_\_\_\_

**DETAILED ACTION**

***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-37, drawn to a method of mutating DNA and screening for mutated DNA which confers herbicide tolerance, and a transgenic plant transformed with a mutated DNA, classified in class 800, subclass 300, for example.
  - II. Claims 38-50, drawn to a mixture of DNA's, classified in class 536, subclass 23.2, for example.
  - III. Claims 51-54, drawn to a method of conferring herbicide tolerance in a plant or plant cell by transformation with shuffled DNA's, classified in class 800, subclass 278, for example.
  - IV. Claims 55-60, drawn to a method of predicting long-term efficacy of a herbicide using a transgenic plant cell, classified in class 435, subclass 468, for example.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the mixture of DNA's of

Group II can be used in a method other than the method of plant cell transformation of Group I, such as a hybridization method. Also, the mixture of DNA's of Group II differs in composition from the mixture of DNA's used in the method of Group I, and hence may not even be usable in the method of Group I.

3. Inventions I and III are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the method of mutating DNA and screening for mutated DNA which confers herbicide tolerance of Group I and the method of conferring herbicide tolerance in a plant or plant cell by transformation with shuffled DNA's of Group III have different starting materials, method steps, and different end products.

4. Inventions I and IV are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the method of mutating DNA and screening for mutated DNA which confers herbicide tolerance of Group I and the method of predicting long term efficacy of a herbicide using a transgenic plant cell of Group IV have different starting materials, different method steps, different end products, and different purposes.

5. Inventions II and III are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different

process of using that product (MPEP § 806.05(h)). In the instant case, the mixture of DNA's of Group II can be used in a method other than the method of plant cell transformation of Group I, such as a hybridization method. Also, the mixture of DNA's of Group II differs in composition from the mixture of DNA's used in the method of Group III, and hence may not even be usable in the method of Group III.

6. Inventions II and IV are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case, the method of predicting long term efficacy of a herbicide using a transgenic plant cell of Group IV does not require the mixture of DNA's mixture of Group II.

7. Inventions III and IV are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case, the method of conferring herbicide tolerance in a plant or plant cell by transformation with shuffled DNA's of Group III and the method of predicting long term efficacy of a herbicide using a transgenic plant cell of Group IV have different starting materials, different method steps, different end products and different purposes.

8. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, recognized divergent subject matter, and because the search required for one of the

groups is not required for another, restriction for examination purposes as indicated is proper.

9. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

10. Applicant is advised that the reply to this requirement to be complete within one month (not less than 30 days) must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David H. Kruse, Ph.D. whose telephone number is (703) 306-4539. The examiner can normally be reached on Monday to Friday from 8:00 a.m. to 4:30 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Paula Hutzell can be reached at (703) 308-4310. The fax phone number for this Group is (703) 308-4242 or (703) 305-3014.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1234.



**AMY J. NELSON, PH.D  
PRIMARY EXAMINER**

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Art Unit: 1638

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David H. Kruse, Ph.D.  
6 October 2000